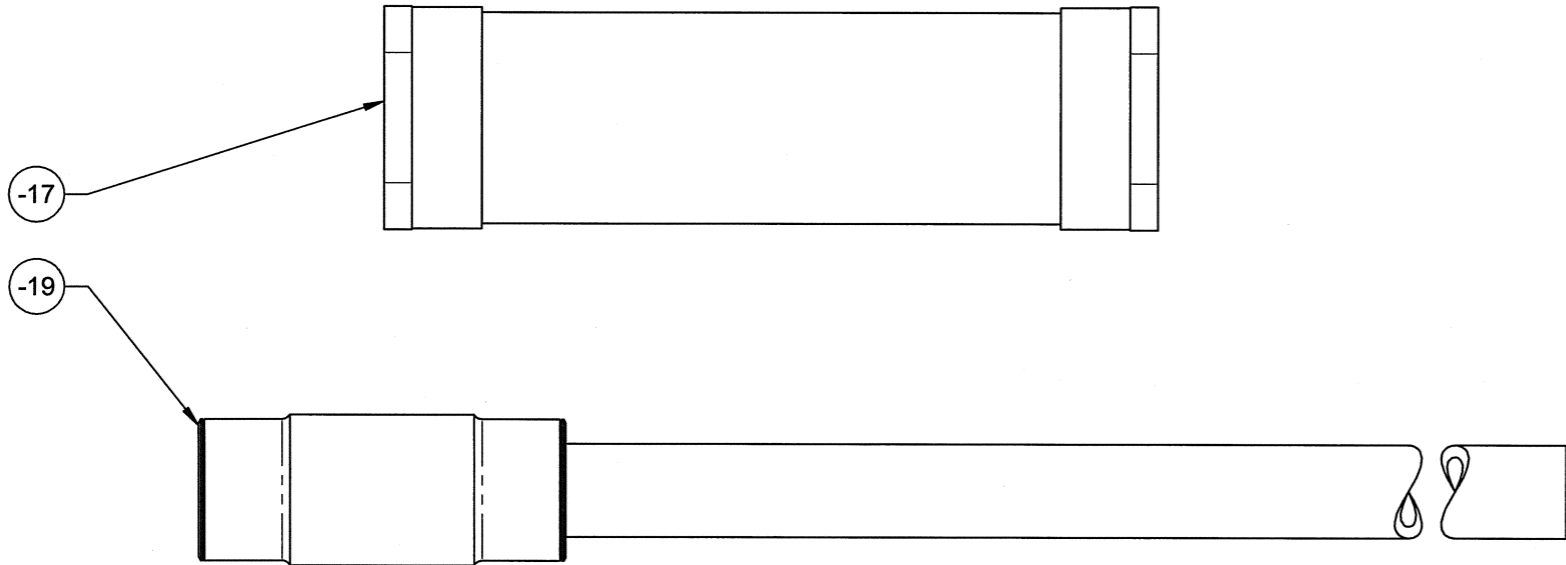


ITEM #	QTY	PART #	PART TITLE
-17	1	RB H4713-17	TRANS. & GEAR BOX DRAIN TOOL ASSEMBLY
-19	1	RB H4713-19	TRANS. & GEAR BOX DRAIN TOOL HOSE ASSEMBLY



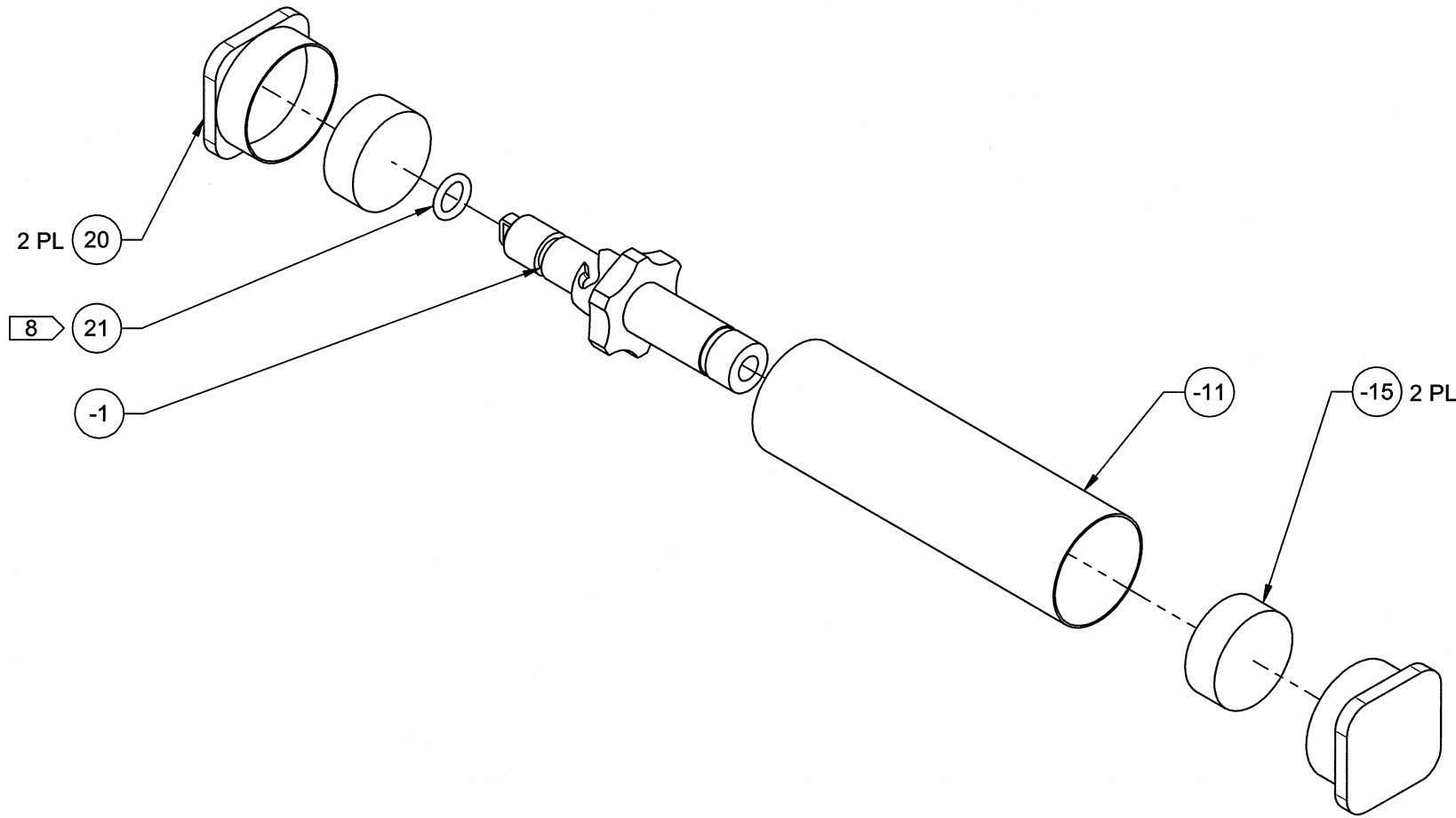
**RB H4713 TRANS. & GEAR BOX DRAIN TOOL**

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NOTES:  
1) MATERIAL: N/A  
2) HEAT TREAT: N/A  
3) FINISH: N/A  
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°  
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"  
5) UNITS: INCHES UNLESS OTHERWISE NOTED  
6) IDENTIFICATION: N/A  
7) ASSEMBLE AS SHOWN  
8) PLACE ITEM -19 COILED INTO A TIGHT FITTING SEALED PLASTIC BAG WITH ITEM -17

F	-15 MATERIAL WAS NewPig#PAD210 OR EQUIV. IS McMaster#1887T48 OR EQUIV.	19-700	MBB
E	SEE PREVIOUS REVISION FOR MORE INFORMATION UPDATED DRAWING TEMPLATE ADDED ITEMS -17 & -19	19-546	MBB
REV.	DESCRIPTION	ECN #	BY
DESIGN	MBB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	MBB		
CHECKED	KPT	TOOL PART #	REV. F
MFG. APPR.	DP	RB H4713	SHEET 1 OF 6
APPROVED	✓	TITLE	SCALE
DATE 4/24/2019		TRANS. & GEAR BOX DRAIN TOOL	NTS
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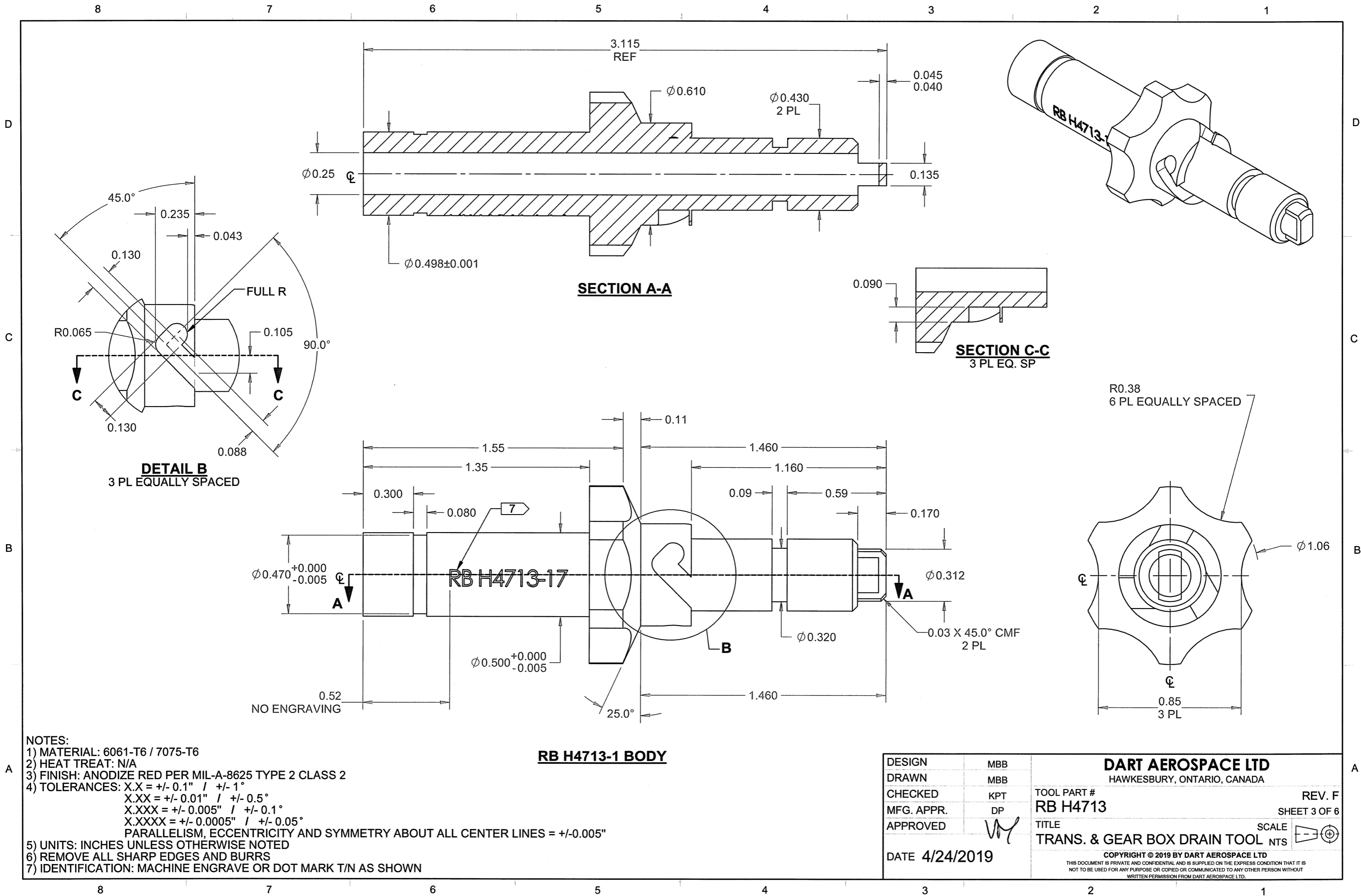
ITEM #	QTY	PART #	PART TITLE
-1	1	RB H4713-1	BODY
-11	1	RB H4713-11	TUBE
-15	2	RB H4713-15	FOAM
20	2	McMaster#2044T67 OR EQUIV.	VINYL END CAP FOR 1.09" ID. SHIPPING TUBE
21	1	McMaster#9263K642 OR EQUIV.	VITON O-RING 7.8 mm ID. X 11.6 mm OD. X 1.9 mm WD.



**RB H4713-17 TRANS. & GEAR BOX DRAIN TOOL ASSEMBLY**

NOTES:  
1) MATERIAL: N/A  
2) HEAT TREAT: N/A  
3) FINISH: N/A  
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°  
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"  
5) UNITS: INCHES UNLESS OTHERWISE NOTED  
6) IDENTIFICATION: N/A  
7) ASSEMBLE AS SHOWN  
8) APPLY MOLYKOTE 55 OR EQUIVALENT ON ITEM 21 THEN ASSEMBLE WITH ITEM -1 AND REMOVE EXCESS

DESIGN	MBB	<b>DART AEROSPACE LTD</b>	
DRAWN	MBB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	TOOL PART #	REV. F
MFG. APPR.	DP	RB H4713	SHEET 2 OF 6
APPROVED	Wp	TITLE	SCALE
DATE 4/24/2019		TRANS. & GEAR BOX DRAIN TOOL NTS	NTS
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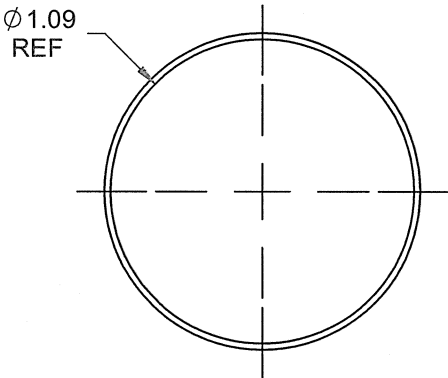
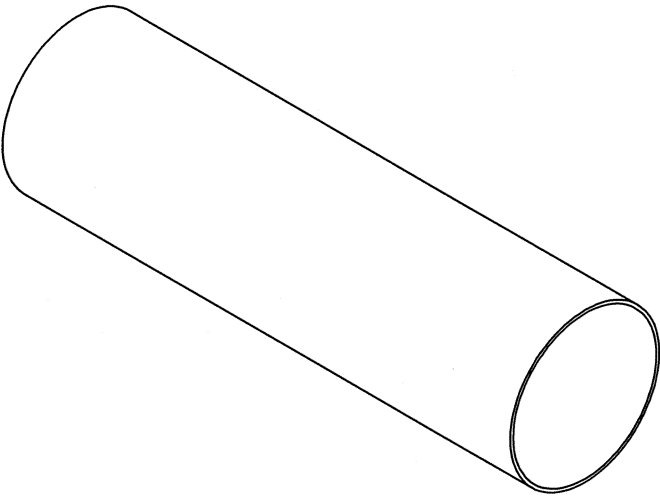
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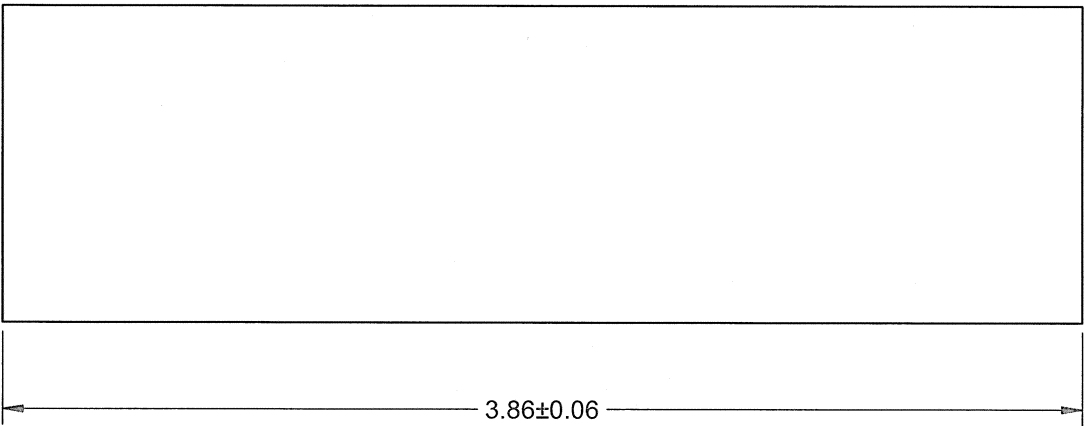
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
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**RB H4713-11 TUBE**



- NOTES:
- 1) MATERIAL: McMaster#2044T67 OR EQUIV. (POLYETHYLENE ROUND SHIPPING TUBE Ø1.09" ID.)
  - 2) HEAT TREAT: N/A
  - 3) FINISH: N/A
  - 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°  
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
  - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 6) REMOVE ALL SHARP EDGES AND BURRS
  - 7) IDENTIFICATION: N/A

DESIGN	MBB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	MBB		
CHECKED	KPT	TOOL PART #	REV. F
MFG. APPR.	DP	<b>RB H4713</b>	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DATE <b>4/24/2019</b>		<b>TRANS. &amp; GEAR BOX DRAIN TOOL</b>	NTS 
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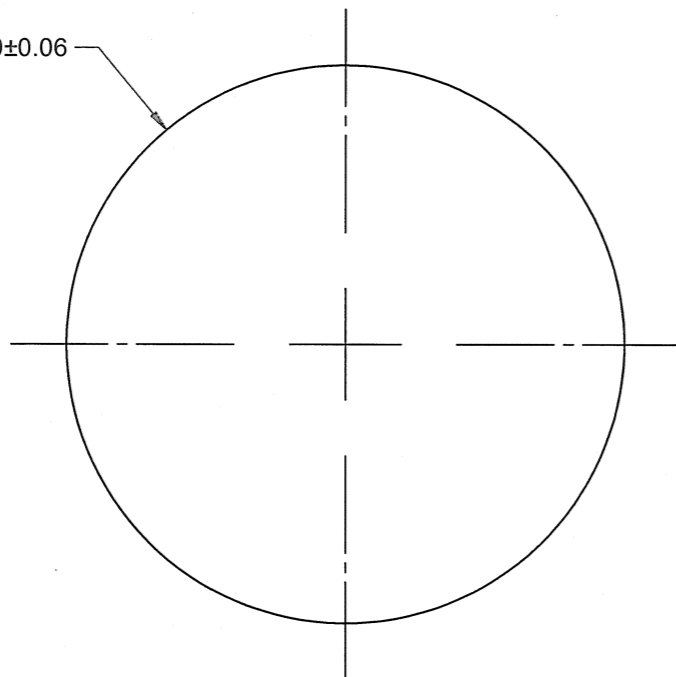
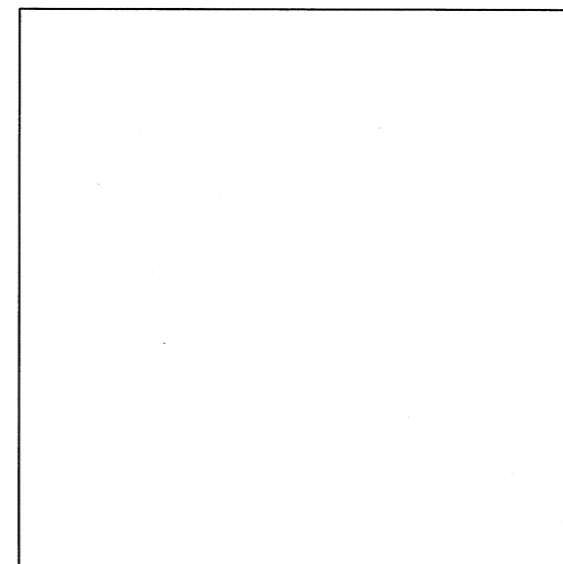
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 $\varnothing 1.00 \pm 0.06$ **RB H4713-15 FOAM**1.00  
REF

## NOTES:

1) MATERIAL: McMaster#1887T48 OR EQUIV. (OIL-RESISTANT BUNA-N FOAM 1" THK.)

2) HEAT TREAT: N/A

3) FINISH: N/A

4) TOLERANCES: X.X = +/- 0.1" / +/- 1°

X.XX = +/- 0.01" / +/- 0.5°



X.XXX = +/- 0.005" / +/- 0.1°

X.XXXX = +/- 0.0005" / +/- 0.05°

PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"

5) UNITS: INCHES UNLESS OTHERWISE NOTED

6) IDENTIFICATION: N/A

DESIGN	MBB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	MBB		
CHECKED	KPT	TOOL PART #	REV. F
MFG. APPR.	DP	<b>RB H4713</b>	SHEET 5 OF 6
APPROVED		TITLE	SCALE
DATE <b>4/24/2019</b>		<b>TRANS. &amp; GEAR BOX DRAIN TOOL</b>	
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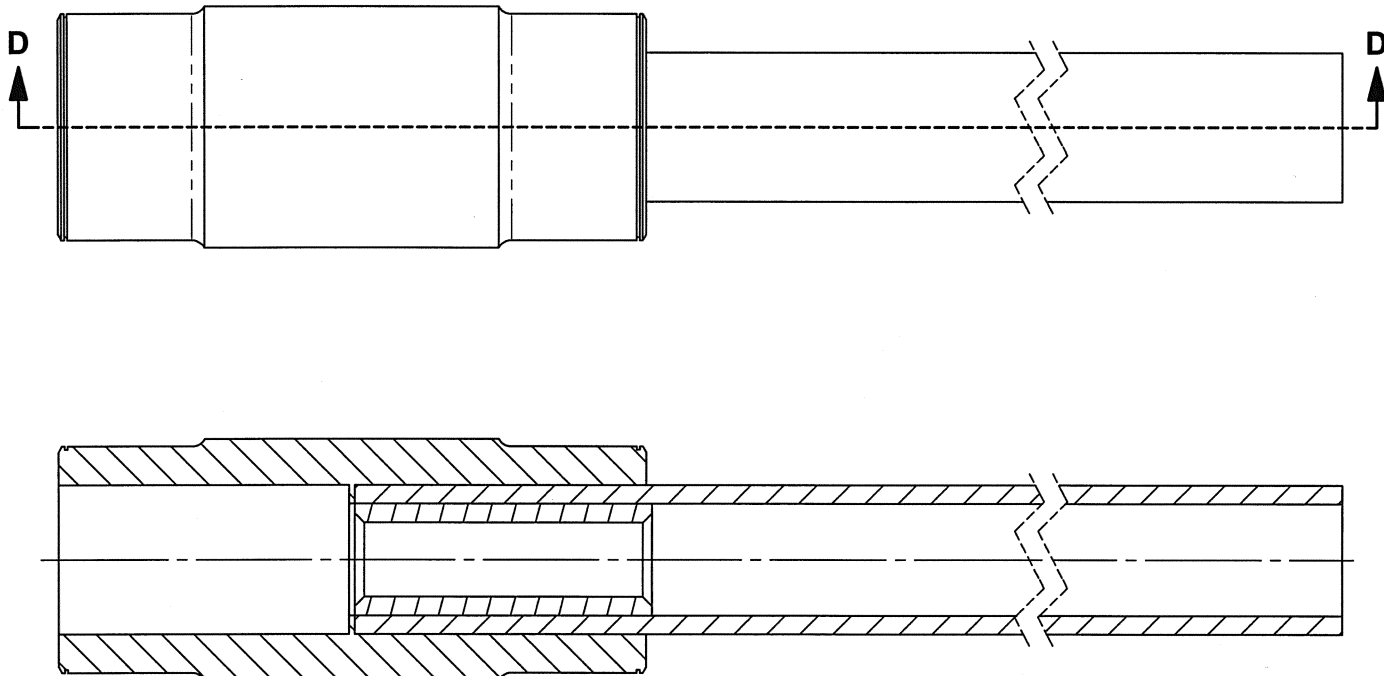
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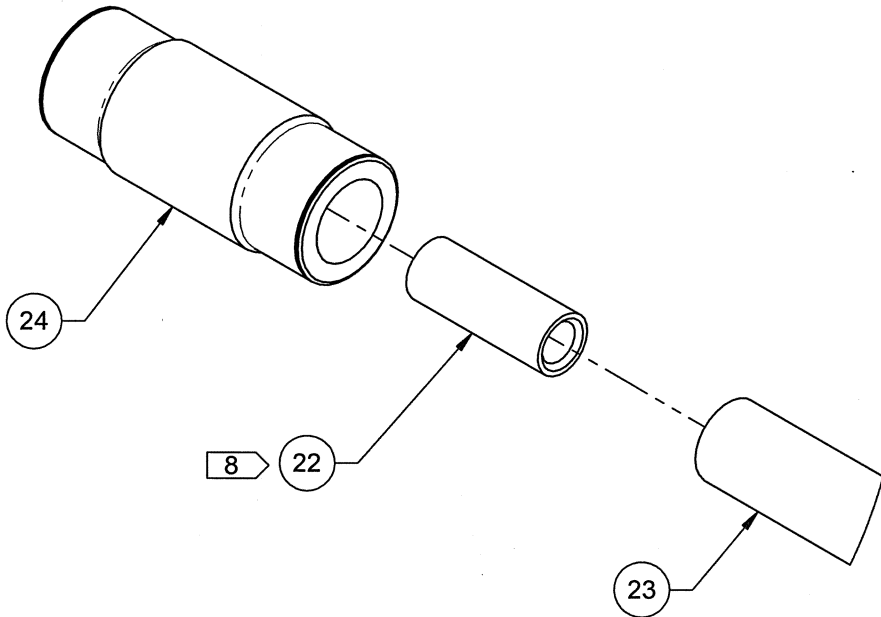
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ITEM #	QTY	PART #	PART TITLE
22	1	DTSP10001	SLEEVE
23	1	Kuri-Tec#K010-0608 OR EQUIV.	CLEAR PVC TUBING 1/2" OD. X 3/8" ID. X 72" LG.
24	1	McMaster#51495K116 OR EQUIV.	NICKEL-PLATED BRASS PUSH-TO-CONNECT 1/2" OD. TUBE FITTING



SECTION D-D



RB H4713-19 TRANS. & GEAR BOX DRAIN TOOL HOSE ASSEMBLY

- NOTES:  
1) MATERIAL: N/A  
2) HEAT TREAT: N/A  
3) FINISH: N/A  
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
                  X.XX = +/- 0.01" / +/- 0.5°  
                  X.XXX = +/- 0.005" / +/- 0.1°  
                  X.XXXX = +/- 0.0005" / +/- 0.05°  
                  PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"  
5) UNITS: INCHES UNLESS OTHERWISE NOTED  
6) IDENTIFICATION: N/A  
7) ASSEMBLE AS SHOWN  
8) INSTALL ITEM 22 INTO ONE END OF ITEM 23 UNTIL FLUSH

DESIGN	MBB	<b>DART AEROSPACE LTD</b>	
DRAWN	MBB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	TOOL PART #	REV. F
MFG. APPR.	DP	<b>RB H4713</b>	SHEET 6 OF 6
APPROVED		TITLE	SCALE
DATE 4/24/2019		<b>TRANS. &amp; GEAR BOX DRAIN TOOL</b>	NTS
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